## Amendments to the Claims:

- 1. (Currently Amended) A catalyst support comprising a Catalyst a support body [[(1)]] having a surface [[(2)]] on which and a coating [[(3),]] bonded to the surface, is provided, wherein the coating [[(3) has]] comprises fissures [[(4)]] having a length (5), those lengths exhibiting a total fissure length of at least about 500 m/m² [meters per square meter] and the coating [[(3) having]] comprises an adhesive tensile strength of at least about 500 N/m² [Newtons per square meter].
- 2. (Currently Amended) <u>The catalyst support Catalyst support body (1)</u> according to <u>claim Claim 1</u>, <u>wherein the coating [[(3) having]] comprises</u> a layer thickness [[(6)]] of at least <u>about 0.02 mm [millimeters].</u>
- 3. (Currently Amended) The catalyst support Catalyst support body (1) according to elaim Claim 1 [[or 2]], the coating (3) having fissures (4) having a length (5), wherein the total fissure length being comprises at least about 1000 m/m² [meters per square meter].
- 4. (Currently Amended) The catalyst support Catalyst support body (1) according to any one of the preceding claims Claim 1, wherein the catalyst support body [[has]] comprises a first thermal expansion coefficient and the coating [[(3) has]] comprises a second thermal expansion coefficient, the two thermal expansion coefficients differing, at least at a temperature in the range of from about 20°C to about 650°C, by at least about 10 %.
- 5. (Currently Amended) The catalyst support Catalyst support body (1) according to any one of the preceding claims Claim 1, wherein the coating [[(3) is]] comprises a catalytically active coating [[(3)]] for a partial oxidation of propene and acrolein.

- 6. (Currently Amended) <u>The catalyst support Catalyst support body (1)</u> according to any one of the preceding claims <u>Claim 1</u>, wherein the coating [[(3)]] comprises at least one inert constituent [[(7)]].
- 7. (Currently Amended) The catalyst support Catalyst support body (1) according to any one of the preceding claims Claim 1, wherein the coating [[(3)]] comprises at least one constituent [[(7)]] containing silicon or aluminum and oxygen.
- 8. (Currently Amended) The catalyst support Catalyst support body (1) according to any one of the preceding claims Claim 4, wherein the catalyst support body [[(1)]] is constructed using metallic material.
- 9. (Currently Amended) The catalyst support Catalyst support body (1) according to any one of the preceding claims Claim 1, wherein the catalyst support body [[(1)]] comprises a multi-walled sheet structure [[(8)]] with at least one channel [[(9)]] through which a fluid is able to flow.
- 10. (Currently Amended) The catalyst support Catalyst support body (1) according to claim 8 or 9 Claim 8, wherein the catalyst support body [[(1)]] comprises a plurality of plates [[(10)]] and the latter form openings [[(11)]] through which a fluid is able to flow.
- 11. (Currently Amended) The catalyst support Catalyst support body (1) according to any one of claims 1 to 7 Claim 1, wherein the catalyst support body [[(1)]] is constructed using ceramic material.

- 12. (Currently Amended) A reactor Reactor [[(25)]] for the preparation of polymerisable polymerizable monomers having at least one reaction chamber [[(12)]] through which a fluid is able to flow, the at least one reaction chamber [[(12)]] comprising at least one catalyst support [[body (1)]] in accordance with Claim 1 any one of the preceding claims.
- 13. (Currently Amended) <u>A process</u> Frocess for the production of a coating [[(3)]] on a surface [[(2)]] of a catalyst support body [[(1)]], which comprises at least the following the process comprising the steps:
  - subjecting the support body to adhesion-enhancing treatment;
  - preparing preparation of a solid/fluid phase with comprising a catalyst suitable for the preparation of capable of forming an organic molecule containing at least one double bond and oxygen[[,]];
  - <u>applying application of the solid/fluid phase to a catalyst the support body [[(1),]];</u> and
  - forming formation of a coating [[(3)]] having fissures [[(4)]] having a length (5), the total fissure length being comprising at least about 500 m/m<sup>2</sup> [meters per square meter] [[,]], the catalyst support body (1) being subjected to adhesion enhancing treatment prior to the application of the solid/fluid phase.
- 14. (Currently Amended) The process Process according to elaim Claim 13, wherein the subjecting of the support body to adhesion-enhancing treatment is prior to the applying application of the solid/fluid phase the catalyst support body (1) is subjected to adhesion-enhancing treatment.

- 15. (Currently Amended) <u>The process</u> <u>Process</u> according to <u>elaim Claim</u> 14, wherein at least one of the following steps is carried out, <u>especially in with respect to the of eatalyst</u> support body (1) of metallic material:
  - a) abrasive blasting [[of the]] a surface [[(2)]];
  - b) machining [[of the]] a surface [[(2)]];
  - c) cleaning [[of the]] <u>a</u> surface [[(2)]]; <u>or</u>
  - d) thermally treating a thermal treatment of the surface [[(2)]].
- 16. (Currently Amended) The process Process according to any one of claims

  Claim 13 [[to 15]], wherein the applying application of the solid/fluid phase is effected comprises at least in accordance with one of the following steps: spray-application spraying, spreading, pouring, or immersion immersing.
- 17. (Currently Amended) The process Process according to any one of claims

  Claim 13 [[to 16]], wherein the catalyst further comprising drying the support body (1) is dried after the applying application of the solid/fluid phase.
- 18. (Currently Amended) <u>The process</u> <u>Process</u> according to <del>any one of claims</del> <u>Claim</u> 13 [[to 17]], wherein <u>the forming of</u> the coating (3) is formed by <u>comprises</u> calcining.
- 19. (Currently Amended) The process Process according to any one of claims

  Claim 13 [[to 18]], wherein further comprising contacting the applied coating [[(3)]] is brought into contact with at least one further additional solid/fluid phase for impregnation of comprising at least one catalytically active material[[s]].

- 20. (Currently Amended) The process Process according to claim Claim 19, wherein further comprising thermally treating the impregnated coating (3) is subjected to a thermal treatment contacted with the at least one additional solid/fluid phase comprising at least one catalytically active material.
- 21. (Currently Amended) The process Process according to any one of claims

  Claim 13 [[to 20]], further comprising reducing the applied coating (3) is reduced.
- 22. (Currently Amended) The process Process according to any one of claims Claim 13 [[to 21]], further comprising at least partially elastically deforming the eatalyst support body (1) is at least partially elastically deformed, so that fissures [[(4)]] are formed in the coating [[(3)]].
- 23. (Currently Amended) A process Process for the preparation of an organic molecule containing at least one double bond and oxygen, in which the process comprising contacting an organic molecule containing at least one double bond is brought into contact with oxygen in the presence of a catalyst support body (1) according to any one of claims Claim 1 [[to 11]].
- 24. (Currently Amended) A process Process for the preparation of an organic molecule containing at least one double bond and oxygen, in which the process comprising contacting an organic molecule containing at least one double bond is brought into contact with oxygen in at least one reactor [[(25)]] according to claim 12.